## SEQUENCE LISTING



## RECEIVED

JAN 2 8 2000

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Borts, Tracy L.

  Broderick, Carol L.

  DiMarchi, Richard D.

  Grinnell, Brian W.

  Miller, Anne R.
- (ii) TITLE OF INVENTION: DIABETES THERAPY
- (iii) NUMBER OF SEQUENCES: 9
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Eli Lilly and Company
  - (B) STREET: Lilly Corporate Center
  - (C) CITY: Indianapolis
  - (D) STATE: Indiana
  - (E) COUNTRY: USA
  - (F) ZIP: 46285
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Floppy disk
  - (B) COMPUTER: IBM PC compatible
  - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 09/091,605
  - (B) FILING DATE: 16-JUN-1998
  - (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Davis, Steven G.
  - (B) REGISTRATION NUMBER: 39,652
  - (C) REFERENCE/DOCKET NUMBER: X-9872
  - (ix) TELECOMMUNICATION INFORMATION:
    - (A) TELEPHONE: (617) 250-1833
    - (B) TELEFAX: (617) 354-6355
- (2) INFORMATION FOR SEQ ID NO:1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 31 amino acids
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (ix) FEATURE:
    - (A) NAME/KEY: Modified-site



- (B) LOCATION: 2
- (D) OTHER INFORMATION: /note= "Xaa at position 2 is Ala, Gly, Val, Thr, and Ile"
  - (ix) FEATURE:
    - (A) NAME/KEY: Modified-site
    - (B) LOCATION: 15
- (D) OTHER INFORMATION: /note= "Xaa at position 15 is Glu, Gln, Ala, Thr, Ser, and Gly"
  - (ix) FEATURE:
    - (A) NAME/KEY: Modified-site
    - (B) LOCATION: 20
- (D) OTHER INFORMATION: /note= "Xaa at position 20 is Lys, and Arg"
  - (ix) FEATURE:
    - (A) NAME/KEY: Modified-site
    - (B) LOCATION: 21
- (D) OTHER INFORMATION: /note= "Xaa at position 21 is Glu, Gln, Ala, Thr, Ser, and Gly; and,"
  - (ix) FEATURE:
    - (A) NAME/KEY: Modified-site
    - (B) LOCATION: 31
- (D) OTHER INFORMATION: /note= "Xaa at position 31 is Gly-OH or is absent"
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

His Xaa Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Xaa Gly 10

Gln Ala Ala Xaa Xaa Phe Ile Ala Trp Leu Val Lys Gly Arg Xaa 25

- (2) INFORMATION FOR SEQ ID NO:2:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 93 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (ix) FEATURE:
    - (A) NAME/KEY: CDS
    - (B) LOCATION: 1..93
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

CAT GCT GAA GGG ACC TTT ACC AGT GAT GTA AGT TCT TAT TTG GAA GGC His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly

15

1

CAA GCT GCC AAG GAA TTC ATT GCT TGG CTG GTG AAA GGC CGA GGA Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly 20 25 30

10

93

- (2) INFORMATION FOR SEQ ID NO:3:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 31 amino acids
    - (B) TYPE: amino acid
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: protein
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly 20 25 30

- (2) INFORMATION FOR SEQ ID NO:4:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 93 base pairs
    - (B) TYPE: nucleic acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (ii) MOLECULE TYPE: cDNA
  - (ix) FEATURE:
    - (A) NAME/KEY: CDS
    - (B) LOCATION: 1..93
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CAT GTT GAA GGG ACC TTT ACC AGT GAT GTA AGT TCT TAT TTG GAA GGC

His Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly

1 10 15

CAA GCT GCC AAG GAA TTC ATT GCT TGG CTG GTG AAA GGC CGA GGA 93
Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly
20 25 30

- (2) INFORMATION FOR SEQ ID NO:5:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 31 amino acids
    - (B) TYPE: amino acid
    - (D) TOPOLOGY: linear

	(ii) MOLECULE TYPE: protein		
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:		
His 1	Val Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly 5 10 15		
Gln	Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg Gly 20 25 30		
(2)	INFORMATION FOR SEQ ID NO:6:		
/	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 105 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>		
	(ii) MOLECULE TYPE: cDNA		
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:		
GACATGCTGA AGGGACCTTT ACCAGTGATG TAAGTTCTTA TTTGGAAGGC CAAGCTGCCA 60			
AGGAATTCAT TGCTTGGCTG GTGAAAGGCC GAGGATAGGG ATCCC 105			
(2)	INFORMATION FOR SEQ ID NO:7:		
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 109 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>		
	(ii) MOLECULE TYPE: cDNA		
	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:		
CTAG	GGGGATC CCTATCCTCG GCCTTTCACC AGCCAAGCAA TGAATTCCTT GGCAGCTTGG	60	
CCTT	CCAAAT AAGAACTTAC ATCACTGGTA AAGGTCCCTT CAGCATGTC	109	
(2)	INFORMATION FOR SEQ ID NO:8:		
	<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 105 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>		

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:	
GACATGTTGA AGGGACCTTT ACCAGTGATG TAAGTTCTTA TTTGGAAGGC CAAGCTGCCA	60
AGGAATTCAT TGCTTGGCTG GTGAAAGGCC GAGGATAGGG ATCCC	105
(2) INFORMATION FOR SEQ ID NO:9:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS: <ul> <li>(A) LENGTH: 109 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul> </li> <li>(ii) MOLECULE TYPE: DNA (genomic)</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:	
CTAGGGGATC CCTATCCTCG GCCTTTCACC AGCCAAGCAA TGAATTCCTT GGCAGCTTGG	60
CCTTCCAAAT AAGAACTTAC ATCACTGGTA AAGGTCCCTT CAACATGTC	109